



**Commonwealth Edison**

1400 Opus Place  
Downers Grove, Illinois 60515

August 29, 1994

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

Attention: Mr. William T. Russell

Subject: Byron Station Inservice Inspection Plan Section 7.0,  
"Inservice Inspection Plan for Pressure Testing", Relief Request  
Cost Beneficial Licensing Action (CBLA)

Byron Station Units 1 and 2  
(NPF-37/66; NRC Docket Nos. 50-454/455)

References: 1. T. K. Schuster letter to R. E. Murley, dated December 4, 1990  
2. R. J. Barrett letter to T. J. Kovach, dated December 6, 1991

Dear Mr. Russell:

In a December 4, 1990 letter from T. K. Schuster to T. E. Murley, Commonwealth Edison Company (ComEd) submitted the most recent revision of the Byron Station Inservice Inspection Plan, Section 7.0, "Inservice Inspection Plan for Pressure Testing". This revision was subsequently approved in the NRC Safety Evaluation Report issued on December 6, 1991.

### Revision Request

Pursuant to 10 CFR 50.55a(g)(5)(iii), ComEd is requesting to modify the inservice inspection requirements. The proposed revision incorporates Relief Request, HR-1, "Alternate Hydrostatic Pressure Test Requirements for ASME Class 1, 2 and 3 Repaired or Replaced Components", Relief Request HR-2, "Alternate Rules for 10 Year Hydrostatic Pressure for Class 3 Systems", and Technical Approach and Position, SP-06, "Adoption of Regulatory Guide 1.147 Approved Code Cases". The relief requests are consistent with ASME Code Case N-416-1 and N-498-1 which have been approved by the Board of Nuclear Codes and Standards (BNCS). Additional NDE requirements for Class 3 welds have also been incorporated into the Relief Request HR-1. Technical Approach and Position, SP-06, adopts NRC accepted ASME Code Cases that are listed in NRC Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability ASME Section XI, Division 1".

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**Cost Beneficial Licensing Action**

Commonwealth Edison respectfully requests that the subject relief request be prioritized as a Cost Beneficial Licensing Action. The proposed relief request modifies a requirement that provides little or no safety benefit, yet will require significant resources to implement.

The number of over-pressure hydrostatic tests due to repairs varies with each outage. The cost of performing such tests also varies greatly depending upon the extent of the repairs and the ease/difficulty of isolating the repaired area. Typically, Byron performs four tests per refueling outage at an average cost of \$10,000 per test. Collectively, the two units at Byron undergo a refueling outage at a rate of three every two years. This equates to a savings of \$60,000 per year for the site. Considering that the remaining life of the station is approximately 30 years, the total savings related to HR-1 alone would be roughly \$2 million.

In addition, Byron budgets approximately \$50,000 per unit per year for scheduled system hydros. Again, considering the remaining 30 year life of the station, the total savings related to HR-2 and Technical Approach and Position SP-06 will be approximately \$3 million (for Class 1, 2 and 3 hydros).

The resource savings due to these relief requests, therefore, satisfies the NRC CBLA Task Force's threshold of \$100,000.

**Schedule**

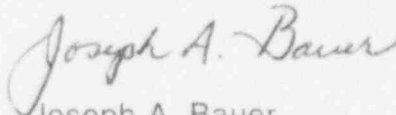
Byron Station anticipates installing the Essential Service Water (SX) Cooling Tower Pipe Replacement Modification in April, 1995. This modification will require relief from the ASME Code as addressed in Relief Request HR-1. Hot tapping and installation of line stops in the 24" ASME Class 3 underground SX supply piping will result in penetration of the pipe pressure boundary. These activities normally require a hydrostatic test prior to restoring the system to service, however, the SX Cooling Towers' supply lines cannot be isolated for a hydrostatic test without both units being shutdown and defueled. Commonwealth Edison, therefore, respectfully requests that the NRC Staff review and approve the requested revisions to the ISI program by March 15, 1995.

August 29, 1994

To the best of my knowledge and belief, the statements contained in this document are true and correct. In some respects these statements are not based on my personal knowledge, but on information furnished by other ComEd employees, contractor employees, and/or consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

Please address any comments or questions regarding this matter to this office.

Respectfully,



Joseph A. Bauer  
Nuclear Licensing Administrator

Attachment 1: Detailed Description of Proposed Change  
Attachment 2: Section 7 Marked-up Pages  
Attachment 3: Section 7 Typed Pages

cc: George F. Dick, Byron Project Manager - NRR  
R. P. Zimmerman, CBLA Programs - NRR  
H. Peterson, SRI - Byron  
B. Clayton, Branch Chief - Region III

# ATTACHMENT 1

## Detailed Description of Proposed Change

### Summary of Change

The proposed change involves a revision to Section 7 of the Byron Unit 1 and Unit 2 Inservice Inspection (ISI) Plan, "Inservice Inspection Program Plan for Pressure Testing". The proposed revision incorporates Relief Request, HR-1, "Alternate Hydrostatic Pressure Test Requirements for ASME Class 1, 2 and 3 Repaired or Replaced Components", Relief Request HR-2, "Alternate Rules for 10 Year Hydrostatic Pressure for Class 3 Systems", and Technical Approach and Position, SP-06, "Adoption of Regulatory Guide 1.147 Approved Code Cases". The relief requests are consistent with ASME Code Case N-416-1 and N-498-1 which have been approved by the Board of Nuclear Codes and Standards (BNCS). Additional NDE requirements for Class 3 welds have been incorporated into the Relief Request HR-1. Technical Approach and Position, SP-06, adopts NRC accepted ASME Code Cases that are listed in NRC Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability ASME Section XI, Division 1".

Please note that Byron Station has incorporated Code Case N-498 for Class 1 and 2 systems. This Code Case has been previously approved for industry use by Regulatory Guide 1.147, as noted in the attached Technical Approach and Position, SP-06.

### Affected Sections of the ISI Plan - Section 7

| <u>Page</u> | <u>Section</u> | <u>Description</u>                          |
|-------------|----------------|---|
| 2           | Index          | Index                                       |
| 4           | 7.1.1          | Inservice Pressure Testing                  |
| 5           | 7.3.0          | Alternate Code Rules (Title Change)         |
| 5           | 7.3.0.1        | Relief Requests (Section Number Change)     |
| 5           | 7.3.0.2        | ASME Code Cases (New)                       |
| 7           | 7.7.0          | References                                  |
| 16          | Table 7.3.0-1  | Relief Request Summaries                    |
| New         |                | Relief Request HR-1 (New)                   |
| New         |                | Relief Request HR-2 (New)                   |
| 17          | Table 7.4.0-1  | Technical Approach and Position Summaries   |
| New         |                | Technical Approach and Position SP-06 (New) |

## Detailed Description of Revisions

### Page 2, Index

Change title of Section 7.3 from "Relief Requests" to "Alternate Code Rules".

### Page 4, Section 7.1.1, Inservice Pressure Testing

Add reference of applicable ASME Code Cases to the first sentence. Change first sentence to read as follows:

"The key features of this Plan are: the Relief Requests, the applicable ASME Code Cases, the explanation of technical approach and positions....."

### Page 5, Section 7.3.0, Relief Requests

Change section title from "Relief Requests" to "Alternate Code Rules".

### Page 5, Section 7.3.0.1, Relief Requests (New Section)

Move text in its entirety from the former Section 7.3.0 to the new section 7.3.1.

### Page 5, Section 7.3.0.2, ASME Code Cases (New Section)

Insert A of Attachment 2 adds a new section that describes the use of ASME Code Cases.

### Page 7, References

Add Reference to Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability ASME Section XI, Division 1".

### Page 16, Table 7.3.0-1, Relief Request Summaries

Add Relief Request HR-1, "Alternate Hydrostatic Pressure Test Requirements for ASME Class 1, 2 and 3 Repaired or Replaced Components".

Add Relief Request HR-2, Alternate Rules for 10 Year Hydrostatic Pressure Testing for Class 3 Systems.

### Table 7.3.0-1 Attachments

Attach Relief Request HR-1 to Table 7.3.0-1.

Attach Relief Request HR-2 to Table 7.3.0-1.

Add Technical Approach and Position SP-06, "Adoption of Regulatory Guide 1.147 Approved Code Cases".

Table 7.4.0-1 Attachments

Attach Technical Approach and Position SP-06 to Table 7.4.0-1.

**Schedule Requirements**

Byron Station anticipates installing the Essential Service Water (SX) Cooling Tower Pipe Replacement Modification in April, 1995. This modification will require relief from the ASME Code as addressed in Relief Request HR-1. Hot tapping and installation of line stops in the 24" ASME Class 3 underground SX supply piping will result in penetration of the pipe pressure boundary. These activities normally require a hydrostatic test prior to restoring the system to service, however, the SX Cooling Towers' supply lines cannot be isolated for a hydrostatic test without both units being shutdown and defueled. Commonwealth Edison, therefore, respectfully requests that the NRC Staff review and approve the requested revisions to the ISI program by March 15, 1995.